

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-47. (canceled)
48. (new) A chimeric protein comprising a *Spiroplasma* DNA methyltransferase (*M.SssI* DNAm^t) and a LexA DNA-binding protein, wherein the *M.SssI* DNAm^t specifically methylates CpG sites adjacent to the DNA binding region of LexA.
49. (new) A vector comprising cDNA encoding a chimeric protein comprising a *Spiroplasma* DNA methyltransferase (*M.SssI* DNAm^t) and a LexA DNA-binding protein, wherein the *M.SssI* DNAm^t specifically methylates CpG sites adjacent to the DNA binding region of LexA.
50. (new) The vector of claim 49, further comprising a LexA binding site and at least one CpG site adjacent to the LexA site.
51. (new) The vector of claim 50, wherein the CpG site is approximately 25 nucleotides from the LexA DNA site.
52. (new) A chimeric protein comprising a LacI protein and *Spiroplasma* DNA methyltransferase (*M.SssI* DNAm^t), wherein the *M.SssI* DNAm^t specifically methylates CpG sites adjacent to the Lac operator sequence.

53. (new) A vector comprising cDNA encoding a chimeric protein comprising a LacI protein and Spiroplasma DNA methyltransferase (M.SssI DNAMt), wherein the M.SssI DNAMt specifically methylates CpG sites adjacent to the Lac operator sequence.
54. (new) The vector of claim 53, further comprising a Lac operator sequence and at least one CpG site adjacent to the Lac operator sequence.
55. (new) The vector of claim 53, wherein the CpG site is approximately 25 nucleotides from the Lac operator sequence.
56. (new) A cell comprising the vector of claim 49 or 53.